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| APPLICATION NO.   | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---|-----------------|----------------------|-------------------------|------------------|--|
| 10/801,059  | 03/16/2004      | Mark Gelfand         | 3659-87                 | 1197             |  |
| 23117   | 7590 08/29/2006 |                      | EXAMINER                |                  |  |
| NIXON & VANDERHYE, PC<br>901 NORTH GLEBE ROAD, 11TH FLOOR |                 |                      | DEAK, LESLIE R          |                  |  |
| ARLINGTON   | •               | COOK                 | ART UNIT PAPER NUMBER   |                  |  |
|   |                 |                      | 3761                    | 3761             |  |
|   |                 |                      | DATE MAIL ED. 09/20/200 | ,                |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| <u> </u>   |  | Application No.   | Applicant(s)   |  |  |  |
|--|--|---|--|--|--|--|
| Office Action Summary  |  | 10/801,059  | GELFAND ET AL.   |  |  |  |
|  |  | Examiner  | Art Unit   |  |  |  |
|  |  | Leslie R. Deak  | 3761   |  |  |  |
|  | - The MAILING DATE of this communication app   | ears on the cover sheet with the c  | orrespondence address  |  |  |  |
| Period for   |  |   |  |  |  |  |
| WHIC - Extensions after \$ - If NO - Failure Any re  | PRIENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DASIONS of time may be available under the provisions of 37 CFR 1.13 DIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, the ply received by the Office later than three months after the mailing of patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status   |  |   |  |  |  |  |
| 1)   | Responsive to communication(s) filed on <u>28 Ju</u>   | <u>ıne 2006</u> .   |  |  |  |  |
| •  | This action is FINAL. 2b) This action is non-final.  |   |  |  |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |  |
|  | closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 11, 45  | 53 O.G. 213.   |  |  |  |
| Disposition  | on of Claims   |   |  |  |  |  |
| 4\⊠  | 4)⊠ Claim(s) <u>19-25</u> is/are pending in the application.   |   |  |  |  |  |
| •  | 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |  |
| 6)⊠  | Claim(s) <u>19-25</u> is/are rejected.   |   |  |  |  |  |
| 7)   | Claim(s) is/are objected to.   |   |  |  |  |  |
| 8)□  | Claim(s) are subject to restriction and/or   | r election requirement.   |  |  |  |  |
| Application  | on Papers  |   |  |  |  |  |
| 9) 🗆 🗆   | The specification is objected to by the Examine  | r.  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>16 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.               |  |   |  |  |  |  |
|  | Applicant may not request that any objection to the  | drawing(s) be held in abeyance. See   | e 37 CFR 1.85(a).  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). |  |   |  |  |  |  |
| 11) 🔲 🛚  | The oath or declaration is objected to by the Ex   | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |
| Priority u   | nder 35 U.S.C. § 119   |   |  |  |  |  |
| 12)  | Acknowledgment is made of a claim for foreign  All b) Some * c) None of:   | priority under 35 U.S.C. § 119(a)   | )-(d) or (f).  |  |  |  |
| , -  | 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |
|  | 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |
|  | 3. Copies of the certified copies of the prior   | rity documents have been receive  | ed in this National Stage  |  |  |  |
|  | application from the International Bureau  |   |  |  |  |  |
| * S  | ee the attached detailed Office action for a list  | of the certified copies not receive   | ed.  |  |  |  |
| Attachment   | (s)  | _   |  |  |  |  |
|  | e of References Cited (PTO-892)  | 4) Interview Summary Paper No(s)/Mail D   |  |  |  |  |
| 3) Inform  | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date   |   | Patent Application (PTO-152)   |  |  |  |

Application/Control Number: 10/801,059

Art Unit: 3761

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
- 2. Claims 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6.471.872 to Kitaevich et al.

Kitaevich discloses, in the specification and figures, the device as claimed by applicant. In particular, Kitaevich discloses a renal function replacement apparatus which may perform hemofiltration, hemodialyisis, or ultrafiltration (see column 2, lines 45-63). The system further comprises a blood withdrawal tube 14, blood reinfusion tube 30, filter 24, filtrate output section 64 and pump 66, a biosensor 140, and a controller 12 (see column 6, generally, column 7, lines 21-35, column 9, lines 16-25). The apparatus monitors patient parameters that may include patient cardiac output, or oxygen saturation in the blood, and that signal is compared to upper and lower values (which are considered to correspond to applicant's threshold and baseline values) and used to control the fluid pumping rates (increasing or decreasing the pumping rate) in the system (see column 3, lines 50-55, column 4, lines 28-37, column 8, lines 32-45). Kitaevich further discloses that the controller may be used in an automatic mode wherein one or more patient parameters are monitored during the hemofiltration operation (which includes an initial phase of blood filtration treatment as claimed by

applicant). The controller then operates based on this real-time patient data, considering one or more specific parameters that are stored, at least briefly, in the controller's processor in order to automatically adjust the operation of the blood filtration device (see column 4, lines 37-43).

With regard to the step of storing a baseline feedback signal during an initial phase of blood filtration treatment, Kitaevich specifically discloses that patient parameters may be programmed into the controller at the start of the blood treatment procedure (see column 9, lines 16-35). Such programming is within the scope of applicant's claimed "initial phase" of blood filtration treatment, since setting up the machine and controller are part of the blood treatment procedure, and such programming may be called an "initial phase" of blood treatment.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,417,872 to Kitaevich et al as applied above, in view of US 4,739,492 to Cochran.

Kitaevich discloses, in the specification and figures, the device as claimed by applicant, with the exception of using a summation step to determine a feedback signal threshold. However, Cochran discloses a method of providing feedback control to a

dialysis system comprising the step of adding an delivery temperature error value (based on a predetermined value) to a temperature obtained via feedback signal. The final delivery temperature error is used as a threshold to toggle the heater on and off during treatment (see column 10, lines 15-57). Cochran discloses that the procedure allows for improved parameter monitoring by comparing actual operating parameters to estimated operating parameters in order to provide more accurate blood treatment (see column 3, lines 15-20).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the summation step disclosed by Cochran in the control algorithm disclosed by Kitaevich in order to provide for more accurate feedback control of the blood treatment system, as taught by Cochran.

### Response to Arguments

- 5. Applicant's amendment and arguments filed 28 June 2006 have been entered and fully considered but they are not persuasive.
- 6. Applicant argues that the Kitaevich device does not perform the steps claimed by applicant. However, applicant's recitations, as presented, drawn to the controller, do not positively claim the actions of the controller. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See MPEP 2114. In the instant case, Kitaevich discloses the structural limitations of the device as claimed by applicant, and controller that is capable

Art Unit: 3761

of performing the actions argued by applicant. As such, the Kitaevich device meets the limitations of the claims.

Examiner recommends that applicant recite the functions of the controller in a manner that claims that the controller is "programmed to" perform the argued functions.

#### Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie R. Deak whose telephone number is 571-272-4943. The examiner can normally be reached on M-F 7:30-5:00, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/801,059 Page 6

Art Unit: 3761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner
Art Unit 3761
22 August 2006

TATYANA ZALUKAEVA SUPERVISORY PRIMARY EXAMINER